



**January 13, 2016**

1516 Ninth Street  
Art Rosenfeld Hearing Room – First Floor  
Sacramento, California 95814  
**10 a.m.**  
(Wheelchair Accessible)

**THE COMMISSION WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING ITEMS:**

1. **CONSENT CALENDAR.** (Items on the Consent Calendar will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
  - a. **UNIVERSITY OF CALIFORNIA, BERKELEY.** Proposed resolution approving Agreement 800-15-002 with University of California, Berkeley, Energy Institute at Haas School of Business for a \$10,000 contract to co-sponsor the 2016 POWER Conference on Energy Research and Policy scheduled in Berkeley, California on March 18, 2016. The 2016 POWER Conference will be the 21st annual conference focusing on electricity markets and systems. (ERPA funding) Contact: Mike Jaske.
2. **ENERGY COMMISSION COMMITTEE APPOINTMENTS.** Proposed approval of appointments to the Energy Commission's Standing Committees and Siting Case Committees. Contact: Kevin Barker. (5 minutes)
  - a. **HIGH DESERT POWER PROJECT, COMMITTEE ASSIGNMENT (97-AFC-1C).** Proposed assignment of a Committee to oversee a petition filed by the project owner, High Desert Power Project (HDPP), LLC, on October 30, 2015 to drought proof the High Desert Power Project. In a motion filed November 6, 2015, HDPP, LLC requests that the Energy Commission take two actions: (1) assign a Committee to oversee the proceedings for the Petition filed with the Commission on October 30, 2015; and (2) act expeditiously to approve or deny the Petition at or before the Commission's Business Meeting held in February 2016 to enable HDPP to prepare for the 2016/2017 water year. Contact: Joseph Douglas. (Staff presentation: 5 minutes)
3. **ENERGY COMMISSION DIVERSITY EFFORTS.** (Informational Item) Staff presentation on the Energy Commission's Diversity Working Group progress to date and plans for the future, including implementation of recent legislation (AB 865 and SB 350). Contact: Alana Mathews. (Staff presentation: 5 minutes)
4. **IMPLEMENTATION OF UPDATED PROCESS, PROCEDURE AND SITING REGULATIONS.** Proposed order approving and directing all committees and existing proceedings to apply the new process and procedure regulations which were published by the Secretary of State and are effective as of January 1, 2016. The order clarifies that the regulations apply to existing proceedings moving forward and that elements of proceedings

already completed should not be reopened and repeated under the new regulations. The order also directs the Executive Director to update or repeal as necessary prior standing orders to comport with the updated regulations and to establish a docket for jurisdictional determinations. Contact: Jared Babula. (Staff presentation: 5 minutes)

5. GENERAL RULEMAKING PROCEEDING FOR SB 350 AND AB 802. Proposed Order Instituting Rulemaking (OIR) to implement new provisions enacted in SB 350 (Stats. 2015, ch. 547) and AB 802 (Stats. 2015, ch. 590) addressing the Renewables Portfolio Standard, data collection, and integrated resource planning. The OIR will be implemented through separate sub-proceedings focused on different rulemaking topics, with separate dockets to distinguish each sub-proceeding. Contact: Sylvia Bender. (Staff presentation: 10 minutes)
6. ORDER INSTITUTING RULEMAKING PROCEEDING. Proposed Order Instituting Rulemaking to update the Appliance Efficiency Regulations, contained in the California Code of Regulations, Title 20, sections 1601-1609. This order will include updates to the certification requirements for consistency with the Modernized Appliance Efficiency Database System, changes as a result of updates in federal regulations, changes to the scope of the battery charger standards to remove rechargeable battery subsystems that are completely contained within a larger product and not capable of operating separate from that product, and other clarifying changes that do not change the underlying efficiency standards. These updates are expected to be presented to the Commission for approval in August 2016. Contact: Kristen Driskell. (Staff presentation: 5 minutes)
7. ~~ENERGY EFFICIENCY STANDARDS FOR SMALL DIAMETER DIRECTIONAL LAMPS AND GENERAL SERVICE LIGHT EMITTING DIODE (LED) LAMPS— HEARING AND POSSIBLE ADOPTION OF REGULATIONS (15-AAER-6). Contact: Harinder Singh. (Staff presentation: 10 minutes). Hearing and consideration of proposed resolution adopting the following:~~
  - a. ~~NEGATIVE DECLARATION. Proposed resolution approving the Negative Declaration, including a finding of No Significant Impact under the California Environmental Quality Act (CEQA), for the proposed energy efficiency standards for small diameter directional lamps and general service LED lamps. This adoption hearing comes after the end of the 30-day comment period necessary to comply with CEQA guidelines.~~
  - b. ~~AMENDMENTS TO THE APPLIANCE EFFICIENCY REGULATIONS. Proposed resolution approving amendments to the Appliance Efficiency Regulations in Title 20 of the California Code of Regulations relating to energy efficiency standards for small diameter directional lamps and general service LED lamps. The proposed standards would reduce electricity consumption by improving the efficiency of these types of lamps. This adoption hearing comes after a 52-day comment period and separate 15-day comment period.~~
8. AGREEMENT STREAMLINING UPDATE. (Informational Item) Staff presentation on the activities of the Agreement Streamlining Team highlighting the improvements made in 2015 related to agreements and solicitations as well as goals for 2016. Contact: Rachel Grant Kiley. (Staff presentation: 10 minutes)
9. ENERGYPRO 7 2016 RESIDENTIAL COMPLIANCE SOFTWARE. Proposed order approving EnergyPro version 7 residential software used to demonstrate performance compliance with the residential provisions of the 2016 Building Energy Efficiency Standards (Public Resources Code Section 25402.1(a)). Contact: Larry Froess. (Staff presentation: 5 minutes)

10. **MECHANICAL ACCEPTANCE TEST TECHNICIAN CERTIFICATION PROVIDER APPLICATION FROM THE NATIONAL ENVIRONMENTAL BALANCING BUREAU.** Proposed order approving the National Environmental Balancing Bureau, Inc. application to become a Mechanical Acceptance Test Technician Certification Provider as provided under the California Code of Regulations, Title 24, Part 1, Section 10-103-B(c). Contact: Joe Loyer. (Staff presentation: 10 minutes)
11. **CITY OF HUNTINGTON BEACH.** Proposed resolution approving Agreement 006-15-ECD with the City of Huntington Beach for a \$3,000,000 loan at one percent interest to fully fund a street LED lighting retrofit project. The street light project is estimated to reduce a total of 3,514,534 kilowatt-hours (kWh) annually saving approximately \$290,546 in utility costs and reducing greenhouse gas emissions by approximately 1,230 tons for the City of Huntington Beach. Based on the loan amount, the simple payback period is approximately 10 years. (ECAA Program Funding) Contact: Hally Cahssai. (Staff presentation: 5 minutes)
12. **COUNTY OF SACRAMENTO DEPARTMENT OF TRANSPORTATION.** Proposed resolution approving Agreement 007-15-ECD with the County of Sacramento Department of Transportation (County) for a \$3,000,000 loan at one percent interest to retrofit 8,233 high pressure sodium and mercury vapor streetlights with LED streetlights. The project is estimated to save 3,021,788 kWh of electricity annually and reduce the County's yearly utility expense by \$225,728. The total project cost is estimated to be \$3,000,000. The simple payback on the loan amount is 13.3 years. (ECAA Program Funding) Contact: Anne Fisher. (Staff presentation: 5 minutes)
13. **DEVELOPING A PORTFOLIO OF ADVANCED EFFICIENCY SOLUTIONS: TECHNOLOGIES AND APPROACHES FOR MORE AFFORDABLE AND COMFORTABLE BUILDINGS, PON-13-301.** This solicitation sought proposals to fund applied research and development projects that develop next generation end-use efficiency technologies and strategies for the building sector. Funded projects must emphasize emerging energy efficiency technologies and improvements to processes and operations in new construction and existing buildings. (EPIC funding) Contact: Heather Bird. (Staff presentation: 10 minutes)
  - a. **ELECTRIC POWER RESEARCH INSTITUTE.** Proposed resolution approving Agreement EPC-15-020 with Electric Power Research Institute (EPRI) for a \$2,705,759 grant to develop a prototype thermostat for low-income and senior housing that will overcome the lack of broadband access. The thermostat will reduce HVAC runtime and energy use, have diagnostic capabilities and provide consumers with access to energy use information. The prototype will be tested in low income and senior housing units in Northern and Southern California.
14. **ENERGY STORAGE APPLIED RESEARCH AND DEVELOPMENT, PON-13-302.** This solicitation sought proposals to develop, demonstrate, test and validate energy storage systems consistent with the California Public Utilities Commission use cases that optimize the value of energy storage; and demonstrate advanced distributed energy storage systems that provide high value ancillary services and load following for the California Independent Systems Operator markets. (EPIC funding) Contact: Ostep Loredon-Contreras. (Staff presentation: 10 minutes)
  - a. **AMBER KINETICS, INC.** Proposed resolution approving Agreement EPC-15-016 with Amber Kinetics, Inc. for a \$2,000,000 grant to fund an advanced flywheel energy storage technology project focused on developing improved rotor material manufacturing processes and shape geometries for higher performance, lower costs, and improved energy densities.

- b. FUEL CELL ENERGY, INC. Proposed resolution approving Agreement EPC-15-014 with Fuel Cell Energy, Inc. for a \$1,199,975 grant to develop an advanced hybrid battery-fuel cell energy storage system to mitigate intermittent renewables and meet peak demand.
  - c. EOS ENERGY STORAGE, LLC. Proposed resolution approving agreement EPC-15-018 with Eos Energy Storage, LLC for a \$1,894,866 grant to develop and test behind-the-meter residential and commercial AC-integrated Znyth battery technology energy storage systems. Two 1-4 kW residential and one 20-40 kW commercial battery systems will be installed and demonstrated on both a stand-alone basis and integrated with solar photovoltaic (PV). The systems will be tested under various applications such as demand charge management, solar PV shifting, and frequency regulation.
  - d. LIGHTSAIL ENERGY. Proposed resolution approving Agreement EPC-15-017 with LightSail Energy for a \$1,085,125 grant to increase the performance and lower the cost of an isothermal compressed air energy storage (I-CAES) system in a microgrid environment. The I-CAES will utilize waste heat, solar PV, and other distributed energy generation through the University of California, Irvine's microgrid.
15. DRIVING THE INTEGRATION OF ELECTRIC VEHICLES TO MAXIMIZE BENEFITS TO THE GRID, PON-14-310. This solicitation sought proposals to develop technologies, tools, and methods for efficiently integrating plug-in electric vehicles into the electricity grid through smart and efficient charging and grid communication interfaces. (EPIC funding) Contact: Reynaldo Gonzalez. (Staff presentation: 5 minutes)
- a. ANDROMEDA POWER, LLC. Proposed resolution approving Agreement EPC-15-015 with Andromeda Power, LLC for a \$681,693 grant to develop an advanced bidirectional, smart, fast charging system to enhance the integration of plug-in electric vehicles into the electricity grid using real time monitors and controls to efficiently enable automated demand response.
16. HYDROGEN REFUELING INFRASTRUCTURE, PON-13-607. This solicitation had two goals: 1) to develop infrastructure necessary to dispense hydrogen transportation fuel; and 2) to provide needed Operation and Maintenance funding to support hydrogen refueling operations prior to the large-scale roll-out of fuel cell electric vehicles. (ARFVTP funding) Contact: Sarah Williams. (Staff presentation: 10 minutes)
- a. ITM POWER, INC. Proposed resolution approving Agreement ARV-15-039 with ITM Power, Inc. for a \$300,000 grant to cover operation and maintenance costs for the hydrogen refueling station located at 8095 Lincoln Avenue, Riverside, CA and gather data about the station.
  - b. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-15-040 with FirstElement Fuel, Inc. for a grant, up to \$240,000 depending on the operational date of the hydrogen refueling station, to cover operation and maintenance costs for the hydrogen refueling station located at 550 Foothill Blvd., La Canada-Flintridge, CA and gather data about the station.
  - c. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-15-041 with FirstElement Fuel, Inc. for a grant, up to \$240,000 depending on the operational date of the hydrogen refueling station, to cover operation and

maintenance costs for the hydrogen refueling station located at 12600 Saratoga Avenue, Saratoga, CA and gather data about the station.

- d. HTEC HYDROGEN TECHNOLOGY & ENERGY CORPORATION. Proposed resolution approving Agreement ARV-15-042 with HTEC Hydrogen Technology & Energy Corporation for a grant, up to \$240,000 depending on the operational date of the hydrogen refueling station, to cover operation and maintenance costs for the hydrogen refueling station located at 17287 Skyline Blvd., Woodside, CA and gather data about the station.
  17. **Minutes:** Possible approval of the December 9, 2015, Business Meeting Minutes.
  18. **Lead Commissioner or Presiding Member Reports.** A Lead Commissioner on a policy matter may report to the Commission on the matter and discussion may follow. A Presiding Member on a delegated committee may report to the Commission on the matter and discussion may follow.
  19. **Chief Counsel's Report:** The Energy Commission may adjourn to closed session with its legal counsel [Government Code Section 11126(e)] to discuss any of the following matters to which the Energy Commission is a party:
    - a. *In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW).*
    - b. *Communities for a Better Environment and Center for Biological Diversity v. Energy Commission* (Court of Appeal, First Appellate District, # A141299).
    - c. *Energy Commission v. SoloPower, Inc. and SPower, LLC.* (Sacramento County Superior Court # 34-2013-00154569).
- The Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation, or that constitute a significant exposure to litigation against the Commission.
20. **Executive Director's Report.**
  21. **Public Adviser's Report.**
  22. **Public Comment:** People may speak up to three minutes on any matter concerning the Energy Commission, with the exception of items appearing elsewhere on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.

If you require special accommodations, contact Lourdes Quiroz at 916-654-5146, five days before the meeting.

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**Adjournment of Hearings and Meetings:** Depending upon time available and the orderly management of proceedings, the Commission may order adjournment (recess or postponement) of any noticed hearing or meeting, to be continued to the next day, another specific date or time, or to the next business meeting, as appropriate. Any such adjournment will be noticed at the time the order of adjournment is made (Government Code §§11128.5, 11129).